PROC. ENTOMOL. SOC. WASH.
87(2), 1985, pp. 308–316

A NEW GENUS AND NEW SPECIES OF DERAEOCORINAE FROM MEXICO AND PANAMA (HEMIPTERA: MIRIDAE)

J. C. SCHAFFNER AND J. C. M. CARVALHO

(JCS) Department of Entomology, Texas A&M University, College Station, Texas 77843; (JCMC) Museu Nacional, Quinta Boa Vista, Rio de Janeiro, R. J., Brazil.

Abstract.—The following new taxa are described: ***Colimacoris occidentalis*** n. gen. and n. sp. from the state of Colima, Mexico; *Florus* ***englemani*** n. sp. and *Lundiella* ***panamensis*** n. sp. from Panama. The adult habitus and male genitalia are illustrated. A key to the members of the genus *Florus* is presented.

Studies on the mirid fauna of Mesoamerica continue to uncover many new and interesting forms. Members of the subfamily Deraeocorinae seldom occur in numbers in collections and consequently are not particularly well known. Recent collecting in Mexico by the senior author has revealed an undescribed genus and species belonging to the tribe Hyaliodini which are described herein. Two additional species belonging to other genera of this subfamily are described from Panama from material made available to us by Dr. Dodge Engleman.

Colimacoris NEW GENUS

Hyaliodini, Deraeocorinae. Characterized by the eyes located well remote from margin of pronotum, pronotum constricted in middle, hemelytron with a row of punctures along claval vein and on embolar suture, presence of 2 areolar cells, and the smooth membrane.

Body shining, bearing erect and semierect hairs. Head smooth, wider than long; eyes small, located anteriorly on head, removed from pronotum by distance equal to almost length of eye; vertex, frons and clypeus convex; vertex with narrow, shallow middorsal sulcus which forks anteriorly with each arm extending to antennal socket; frons projecting slightly anterior to antennal sockets as seen from above; jugum, lorum and clypeus in lateral view projecting conspicuously anterior to antennal socket; gena reduced; buccula prominent. Antennal socket touching eye; antennal segments linear, segment I distinctly longer than head width, segments III and IV shorter than I. Rostrum reaching midcoxae.

Pronotum shallowly punctate, constricted at middle; collar about as long as diameter of antennal segment I; calli contiguous, raised, smooth; lateral margins of pronotum rounded, posterior margin more or less straight. Mesoscutum exposed. Scutellum prominent. Hemelytron hyaline, embolium glabrous except for row of hairs along outer margins, wider than diameter of antennal segment I and delimited over ½ its length by row of prominent punctures; another row of similar punctures running along claval vein; length of cuneus less than 1½ × width; membrane clear, not appearing granulate with 2 cells with the larger one with a short

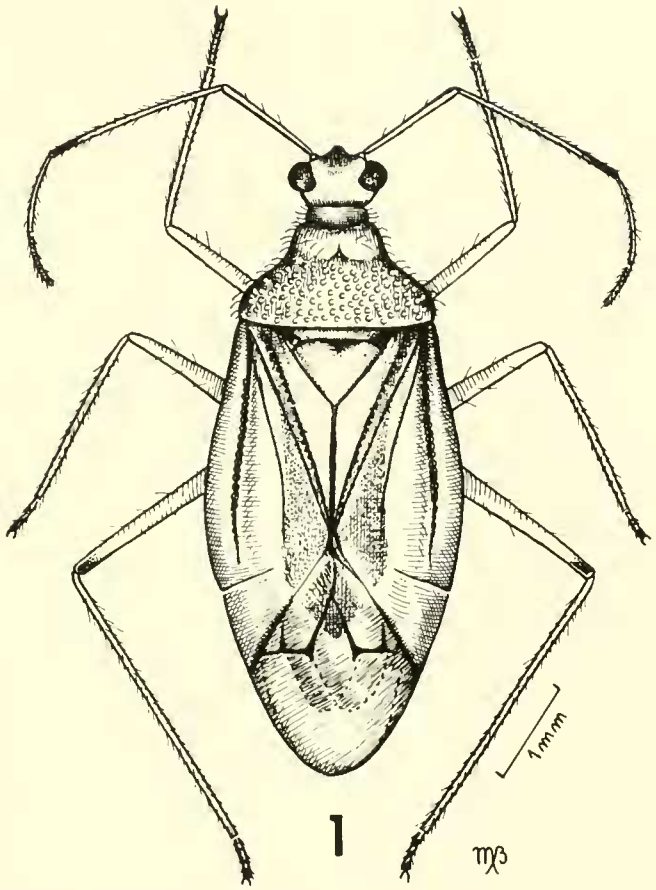


Fig. 1. *Colimacoris occidentalis* n. sp., male.

vein extension or diffused area on external side of apical angle. Legs long, femora and tibiae cylindrical.

Type species: *Colimacoris occidentalis* n. sp.

Colimacoris most closely resembles the well known genus *Hyaliodes* Reuter. Dorsally, the head of *Colimacoris* has the frons rounded and clearly extending anteriorly beyond the anterior margin of the eye. Species of *Hyaliodes* have the frons more flattened and it does not project beyond the anterior margin of the eye. The anterior part of the pronotum of *Colimacoris* is flatter and not as narrow as that of *Hyaliodes*. The hemelytron of *Colimacoris* has a row of punctures running along the entire length of the claval vein, the relatively wider embolium has hairs only along the margins, the membrane is not granulate and there are two areolar cells in the membrane. In contrast, species of *Hyaliodes* lack the row of punctures along the claval vein, have hairs in the middle of the relatively narrower embolium, the membrane is granular in appearance and only one areolar cell is present. A single female from near Jilotepec, Veracruz, representing an undescribed second species of *Colimacoris*, agrees in all features although the vein between the two areolar cells is not as well formed.

The genus is named after the state in Mexico in which the type species was collected. The name is masculine.

Colimacoris occidentalis New Species
Figs. 1–4

Male (measurements taken from 17 specimens; those of holotype given first followed in parentheses by average and ranges): Length, 6.10 mm (5.61 mm, 5.02–6.20 mm); width, 2.24 mm (2.06 mm, 1.92–2.28 mm). Head length, 0.52 mm (0.54 mm, 0.50–0.58 mm); width through eyes, 0.86 mm (0.85 mm, 0.80–0.88 mm); vertex width, 0.46 mm (0.46 mm, 0.44–0.48 mm). Length of antennal segment I, 1.22 mm (1.15 mm, 1.08–1.26 mm); II, 1.80 mm (1.72 mm, 1.56–1.84 mm); III, 1.02 mm (1.00 mm, 0.88–1.12 mm); IV, 0.40 mm (0.46 mm, 0.40–0.52 mm). Pronotal length, 1.06 mm (1.07 mm, 1.00–1.16 mm); width, 1.68 mm (1.57 mm, 1.48–1.68 mm). Cuneal length, 0.90 mm (0.91 mm, 0.82–1.02 mm); width, 0.68 mm (0.64 mm, 0.58–0.76 mm).

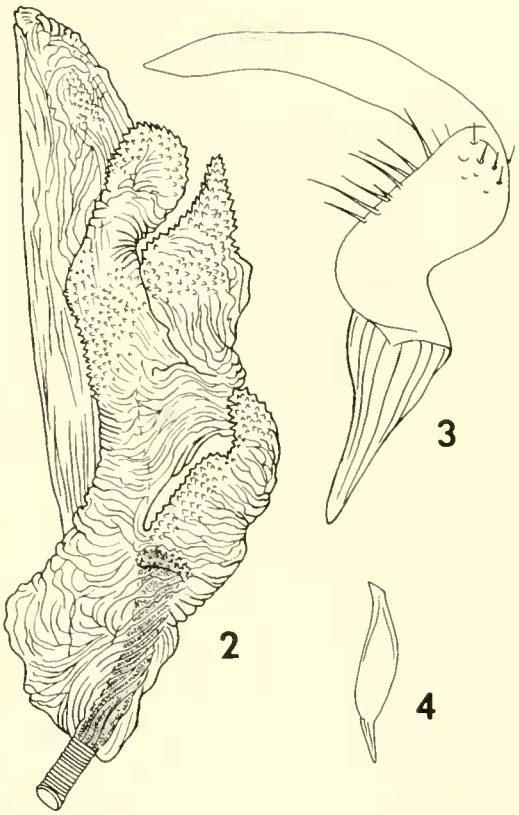
General coloration pale with light fuscous markings. Head pale to light brown with anterior grooves of sulcus fuscous thereby forming light inverted V on frons; apex of antennal segment II and sometimes basal inner margin of segment I fuscous, remainder of antenna pale; rostrum pale. Pronotum pale, punctures slightly darker; collar almost white; spot on humeral angle, line along posterior margin of collar and horizontal line above coxal cleft fuscous; lateral margins of mesoscutum dark fuscous, remainder pale. Scutellum pale, occasionally with small fuscous spot near apex. Hemelytron clear with faint spot at base, another larger one or two located near center of corium; row of punctures along claval vein; claval commissure and inner margin of corium extending along inner margin of cuneus fuscous; membrane clear, occasionally with veins fuscous; spot above base of mesocoxa dark fuscous, remainder of thoracic pleural and sternal areas and abdomen pale.

Genitalia: Aedeagus (Fig. 2) with four lobes; left paramere (Fig. 3) elongate, curved, with elongate dorsal setae; right paramere (Fig. 4) small, pointed apically.

Female (measurements taken from 10 specimens; the average is given first followed in parentheses by the ranges): Length, 5.97 mm (5.56–6.50 mm); width, 2.28 mm (2.14–2.54 mm). Head length, 0.56 mm (0.52–0.62 mm); width through eyes, 0.86 mm (0.84–0.92 mm); vertex width, 0.46 mm (0.42–0.50 mm). Length of antennal segment I, 1.02 mm (0.78–1.16 mm); II, 1.63 mm (1.36–1.88 mm); III, 0.97 mm (0.82–1.08 mm); IV, 0.49 mm (0.42–0.52 mm). Pronotal length, 1.09 mm (1.06–1.16 mm); width, 1.67 mm (1.60–1.82 mm). Cuneal length, 0.96 mm (0.90–1.06 mm); width, 0.73 mm (0.62–0.74 mm).

Similar to male in form and color.

Holotype: MEXICO: Jalisco, Nevado de Colima road, 7 mi. w hwy. junct. (near Atenquique), August 5, 1978, Plitt & Schaffner. Deposited in the collection of the Instituto de Biologia, Universidad Nacional Autonoma de Mexico, Mexico City, D. F. *Paratypes:* 8 ♂, 3 ♀, same data as holotype; ♂, MEXICO: Jalisco, 16 km. n. Autlan, July 31–August 2, 1978, Plitt & Schaffner; 2 ♂, ♀, Colima, 9 mi. ne. Comala, July 17–18, 1983, Kovarik, Harrison, Schaffner; 7 ♂, 6 ♀, Colima, 10 mi. ne. Comala, July 17–19, 1983, Kovarik, Harrison, Schaffner. Deposited in the National Museum of Natural History, Washington, D.C.; the collection of the De-



Figs. 2–4. *Colimacoris occidentalis* n. sp. 2, Aedeagus. 3, Left paramere. 4, Right paramere.

partment of Entomology, Texas A&M University, College Station, Texas; and the J. C. M. Carvalho collection, Rio de Janeiro, R. J., Brazil.

Florus englemani New Species

Figs. 5–9

Male (holotype): Length, 3.02 mm; width, 1.56 mm. Head length, 0.10 mm; width through eyes, 0.64 mm; vertex width, 0.32 mm. Length of antennal segment I, 0.23 mm; II, 0.84 mm; III & IV missing. Pronotal length, 0.74 mm; width, 1.22 mm. Cuneal length, 0.40 mm; width, 0.56 mm.

General coloration pale and dark brown. Head brown, clypeus, antennae and rostrum pale. Thorax dark brown, evaporative area pale; hemelytron with clavus and adjacent area of corium down to apex of scutellum, outer edge of embolium including embolar suture, cuneus dark brown, remainder of wing pale; legs pale. Abdomen pale white.

Body glabrous dorsally, underside of embolium and cuneus with short scattered hairs. Second antennal segment linear, somewhat incrassate, hairs more or less scattered equally along length of segment. Rostrum reaching mid coxae. Pronotum convex, strongly punctate.

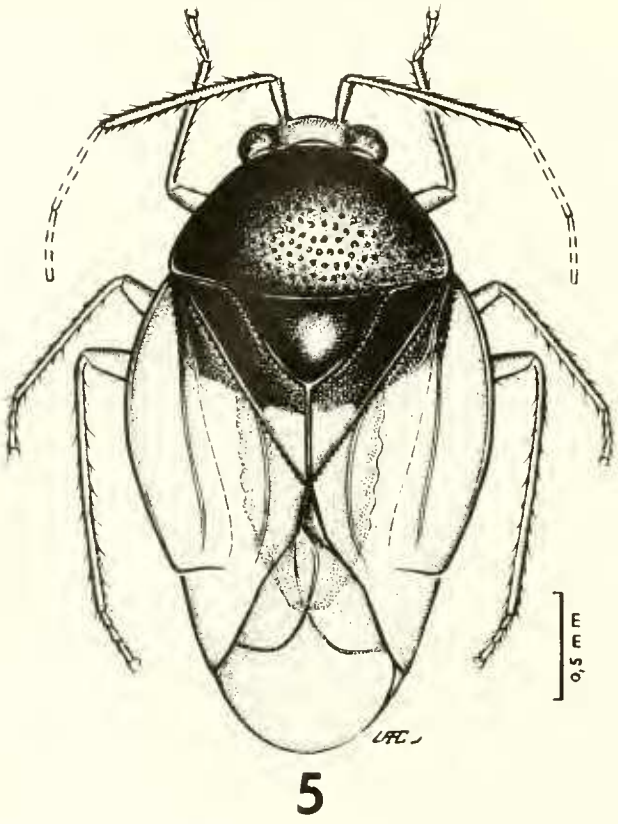


Fig. 5. *Florus englemani* n. sp., male.

Genitalia: Aedeagus (Fig. 6) with branched membranous lobes; left paramere (Fig. 7) elongate, recurved apically, with dorsal setae; right paramere (Fig. 8) small; pygophore (Fig. 9) with characteristic anal tube.

Female (paratype): Length, 3.54 mm; width, 1.68 mm. Head length, 0.10 mm; width through eyes, 0.66 mm; vertex width, 0.32 mm. Length of antennal segment I, 0.22 mm; II, 0.60 mm; III and IV missing. Pronotal length, 0.84 mm; width, 1.28 mm. Cuneal width, 0.42 mm; length, 0.52 mm.

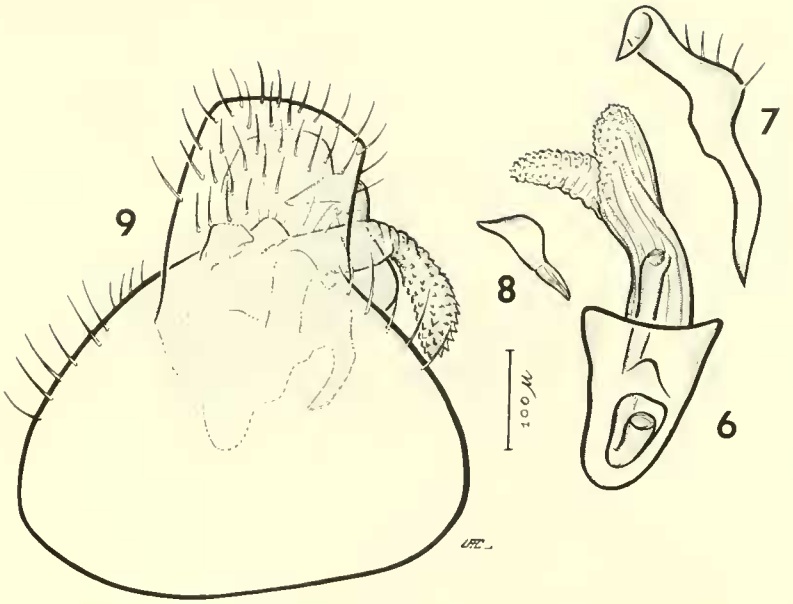
Similar to male in color and morphology. Second antennal segment slender at base becoming thicker apically, hairs more concentrated on apical half.

Holotype: ♂, PANAMA—Chiriqui, Fortuna, 1050 m., 8°44′N; 82°15′W, 2-IV-1978, Henk Wolda. Deposited in the National Museum of Natural History, Washington, D.C. *Paratype:* ♂, Panama, CZ, Fortuna, V'77, H. Wolda coll. Deposited in the collection of the Department of Entomology, Texas A&M University, College Station, Texas.

This species is named in honor of Dodge Engleman who generously made this and other material available to us for study.

Following is a key to the known species of the genus *Florus*:

1. Scutellum more or less uniformly brownish or black in color 2
– Scutellum not uniformly brown or black in color 4



Figs. 6–9. *Florus englemani* n. sp. 6, Aedeagus. 7, Left paramere. 8, Right paramere. 9, Pygophore, ventral view.

2. Pronotum uniformly dark brown; corium lacking a medially located transverse fascia ..... *englemani* n. sp.
– Pronotum not uniformly dark colored; corium with a transverse fascia . 3
3. Corial fascia continuous; pronotum pale only along posterior margin .. .. *insolitus* Distant
– Corial fascia broken at middle; pronotum mostly pale with two transverse dark fasciae ..... *vitreus* (Stal)
4. Scutellum with black middorsal line; clavus with four small black spots ..... *vittiscutellatus* Carvalho
– Scutellum lacking a black middorsal line; clavus without four small black spots 5
5. Cuneus with dark spot; disc of pronotum with middle line located posteriorly and hind margin pale ..... *vittifrons* Carvalho
– Cuneus unicolorous; disc of pronotum with median line, two oblique spots and hind margin pale ..... *bolivianus* Carvalho & Gomes

Lundiella panamensis New Species
Figs. 10–13

Male (measurements taken from 13 specimens; those of holotype given first followed in parentheses by average and ranges): Length, 2.94 mm (2.86 mm, 2.70–3.00 mm); width, 1.62 mm (1.57 mm, 1.44–1.70 mm). Head length, 0.14 mm (0.14 mm, 0.12–0.18 mm); width through eyes, 0.78 mm (0.78 mm, 0.76–0.80 mm); vertex width, 0.32 mm (0.32 mm, 0.30–0.34 mm). Length of antennal segment I, 0.24 mm (0.24 mm, 0.22–0.26 mm); II, 0.80 mm (0.78 mm, 0.74–

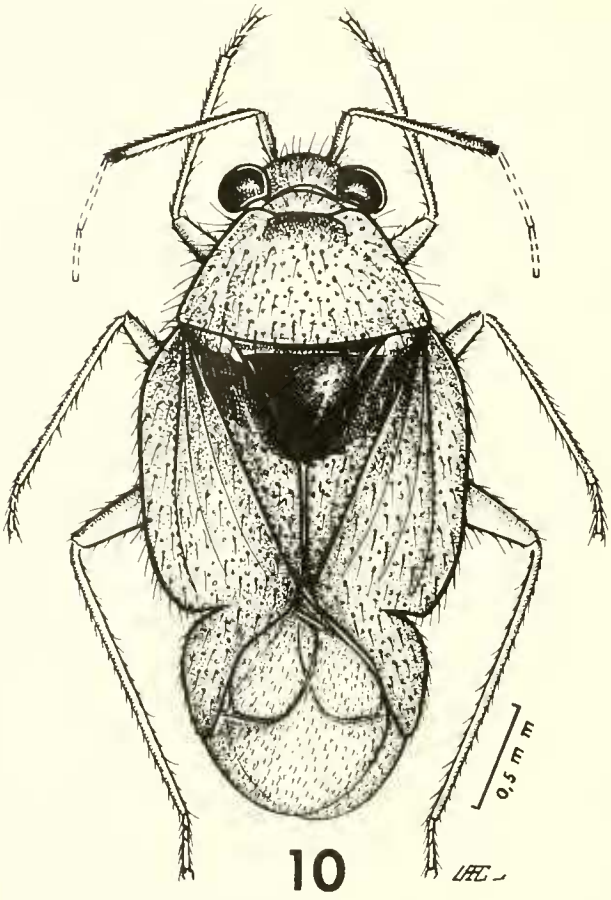
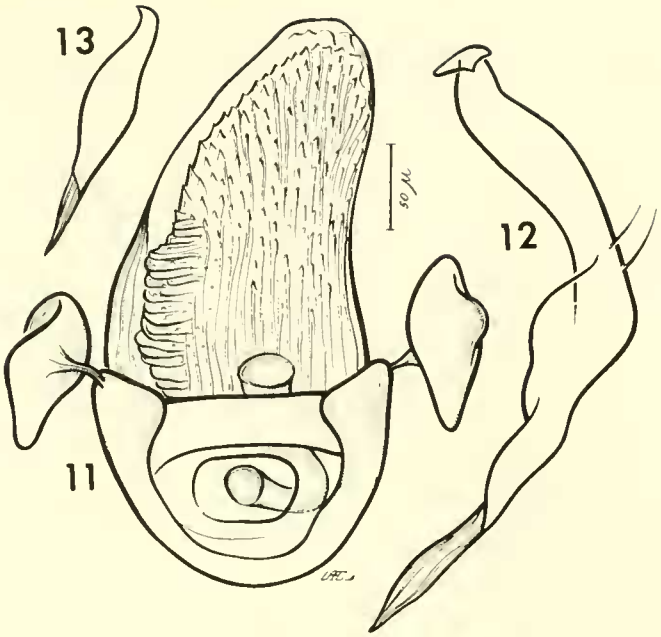


Fig. 10. *Lundiella panamensis* n. sp., male.

0.80 mm); III, 0.40 mm (0.38 mm, 0.36–0.40 mm); IV, 0.34 mm (0.34 mm, 0.26–0.38 mm). Pronotal length, 0.82 mm (0.79 mm, 0.74–0.82 mm); width, 1.22 mm (1.22 mm, 1.18–1.28 mm). Cuneal width, 0.56 mm (0.56 mm, 0.52–0.60 mm); length, 0.40 mm (0.39 mm, 0.36–0.42 mm).

General coloration light brown and lutescent with dark fuscous to black markings. Head, antennae, pronotum except for posterior margin, pro-, meso- and metathoracic legs apical to base of femur pale to light brown; posterior margin of pronotum and occasionally posterior edge of lateral margin, hemelytron except for area immediately adjacent to scutellum, lutescent; scutellum, area of hemelytron immediately adjacent to scutellum, meso- and metapleura, meso- and metacoxae, meso- and metatrochanters and bases of femora immediately adjacent to trochanters and posterior area of abdomen dark fuscous to black; basal ⅔ of wing membrane light fuscous, remainder pale.

Pubescence of body consisting of elongate erect and semierect hairs; a few hairs on antennal segment I, most hairs on segments III and IV longer than diameter of segment, those of segment II about as long or shorter than diameter of segment; hairs of pro- and mesotibiae longer than diameter of segment, those of metatibiae



Figs. 11–13. *Lundiella panamensis* n. sp. 11, Aedeagus. 12, Left paramere. 13, Right paramere.

as long as or shorter than diameter of segment; membrane of hemelytron with closely set, short but conspicuous hairs. Second antennal segment linear. Rostrum reaching apices of mesocoxae.

Genitalia: Aedeagus (Fig. 11) simple, with membranous lobes bearing sclerotized minute teeth; left paramere (Fig. 12) elongate, curved, with characteristic apical end; right paramere (Fig. 13) small.

Female: Unknown.

Holotype: ♂, PANAMA, Bocas d.T., Corriente Grande 100 m, 9°17′30″N; 82°32′41″W, March 18–23, 1980, Henk Wolda. Deposited in the National Museum of Natural History, Washington, D.C. *Paratypes:* 2 ♂, same data as holotype; 2 ♂, same data as holotype except April 2–8, 1980; 3 ♂, same data as holotype except April 12–14, 1980; 2 ♂, same data as holotype except April 20–25, 1980; 2 ♂, same data as holotype except April 27–28, 1980. Deposited in the National Museum of Natural History, Washington, D.C.; the collection of the Department of Entomology, Texas A&M University, College Station, Texas; and in the J.C.M. Carvalho collection, Rio de Janeiro, R. J., Brazil.

By virtue of its coloration, *Lundiella panamensis* exits at couplet 5 in the key to members of the genus (Carvalho and Capriles, 1982) along with *L. amazonica* Carvalho and *L. peruana* Carvalho and Capriles. The width of the head and the length of antennal segment II are approximately the same in *L. panamensis* and *L. amazonica* whereas the second antennal segment of *L. peruana* is twice the length of the head width. The black coloration on the hemelytron of *L. amazonica* extends onto the embolium but is limited to no more than the base of the clavus in the case of *L. panamensis*. The genitalia of the three species also differ.

Acknowledgments

The authors thank Luiz Antonio Alves Costa for the preparation of the illustrations and H. R. Burke for his critical review of the manuscript.

Literature Cited

Carvalho, José C. M. and J. Maldonado Capriles. 1982. Neotropical Miridae, CCXXVIII: Genus *Lundiella* Carvalho with descriptions of new species (Hemiptera). Rev. Brasil. Biol. 42(1): 55–61.